

# P802.11ak

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**Submitter Email:** [d3e3e3@gmail.com](mailto:d3e3e3@gmail.com)

**Type of Project:** Amendment to IEEE Standard 802.11-2012

**PAR Request Date:** 20-Sep-2012

**PAR Approval Date:**

**PAR Expiration Date:**

**Status:** Unapproved PAR, PAR for an Amendment to an existing IEEE Standard

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**1.1 Project Number:** P802.11ak

**1.2 Type of Document:** Standard

**1.3 Life Cycle:** Full Use

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**2.1 Title:** Standard for Information technology--Telecommunications and information exchange between systems Local and metropolitan area networks--Specific requirements Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications Amendment: Enhancements For Transit Links Within Bridged Networks

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**3.1 Working Group:** Wireless LAN Working Group (C/LM/WG802.11)

**Contact Information for Working Group Chair**

**Name:** Bruce Kraemer

**Email Address:** [bkraemer@marvell.com](mailto:bkraemer@marvell.com)

**Phone:** 321-751-3988

**Contact Information for Working Group Vice-Chair**

**Name:** Jon Rosdahl

**Email Address:** [jrosdahl@ieee.org](mailto:jrosdahl@ieee.org)

**Phone:** 801-492-4023

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**3.2 Sponsoring Society and Committee:** IEEE Computer Society/LAN/MAN Standards Committee (C/LM)

**Contact Information for Sponsor Chair**

**Name:** Paul Nikolich

**Email Address:** [p.nikolich@ieee.org](mailto:p.nikolich@ieee.org)

**Phone:** 857.205.0050

**Contact Information for Standards Representative**

**Name:** James Gilb

**Email Address:** [gilb@ieee.org](mailto:gilb@ieee.org)

**Phone:** 858-229-4822

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**4.1 Type of Ballot:** Individual

**4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot:** 05/2015

**4.3 Projected Completion Date for Submittal to RevCom:** 08/2016

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**5.1 Approximate number of people expected to be actively involved in the development of this project:** 45

**5.2.a. Scope of the complete standard:** The scope of this standard is to define one medium access control (MAC) and several physical layer (PHY) specifications for wireless connectivity for fixed, portable, and moving stations (STAs) within a local area.

**5.2.b. Scope of the project:** This amendment specifies protocols, procedures, and managed objects to enhance the ability of IEEE P802.11 media to provide internal connections as transit links within IEEE Std 802.1Q bridged networks.

**5.3 Is the completion of this standard dependent upon the completion of another standard:** Yes

**If yes please explain:** This amendment will require features to be standardized in parallel with IEEE P802.1Qbz. This project will be amending the IEEE Std 802.11-2012, and the IEEE P802.1Qbz project will make the corresponding changes that are necessary for the overall solution.

**5.4 Purpose:** The purpose of this standard is to provide wireless connectivity for fixed, portable, and moving stations within a local area. This standard also offers regulatory bodies a means of standardizing access to one or more frequency bands for the purpose of local area communication.

**5.5 Need for the Project:** There are a large number of new products including home entertainment systems and industrial control equipment that have both an IEEE 802.11 wireless station capability and a wired IEEE 802.3 Ethernet capability. IEEE 802.11 has media operating in the gigabit per second range and has standardized security and quality of service improvements. These developments raise a demand for bridging of IEEE 802.11 media to the same level as other media can be bridged: as media internal to the network as well as media offering access to the network.

**5.6 Stakeholders for the Standard:** Vendors, users, administrators, designers, customers, and owners of mixed IEEE 802.11 wireless and other IEEE 802 networks.

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**Intellectual Property**

**6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?:** No

**6.1.b. Is the Sponsor aware of possible registration activity related to this project?:** No

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**7.1 Are there other standards or projects with a similar scope?:** Yes

**If Yes please explain:** IEEE Std 802.11-2012 includes a definition for a Mesh Network which addresses a part of this need. However, the wired and wireless parts of a mixed wired and wireless mesh network are opaque to each other, resulting in inefficiencies.

**and answer the following**

**Sponsor Organization:** C/LM

**Project/Standard Number:** 802.11-2012

**Project/Standard Date:** 29-Mar-2012

**Project/Standard Title:** IEEE Standard for Information technology-- Telecommunications and information exchange between systems Local and metropolitan area networks-- Specific requirements Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications

**7.2 Joint Development**

**Is it the intent to develop this document jointly with another organization?:** No

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**8.1 Additional Explanatory Notes (Item Number and Explanation):**